



# team SENTINEL<sup>®</sup>

## Espy RF Multicoupler Solutions

Espy offers both HF and V/UHF RF multicoupler solutions to address our customers demand for high-fidelity wideband RF distribution. Individual modules support 1-In by 5-Out and can be delivered in a 1RU or 4RU rack-mount enclosure. The 1RU enclosure supports up to two (2) 1x5 modules side-by-side and can be stacked as necessary to meet changing RF input requirements. The 4RU module supports up to twelve (12) 1x5 modules to improve rack elevation density by up to 33% over the 1 RU enclosure solution. HF and V/UHF modules are interchangeable and can be mixed as needed to meet unique mission requirements.



### HF 1x5 Multicoupler Module

Espy's teamSENTINEL active HF multicoupler module provides HF in-phase RF distribution from a single antenna source with up to five (5) RF outputs, making them ideal for demanding HF direction finding applications. Nominal gain allows units to be daisy chained if more outputs are needed. Each module supports 1-In by 5-Out wideband HF RF connections.

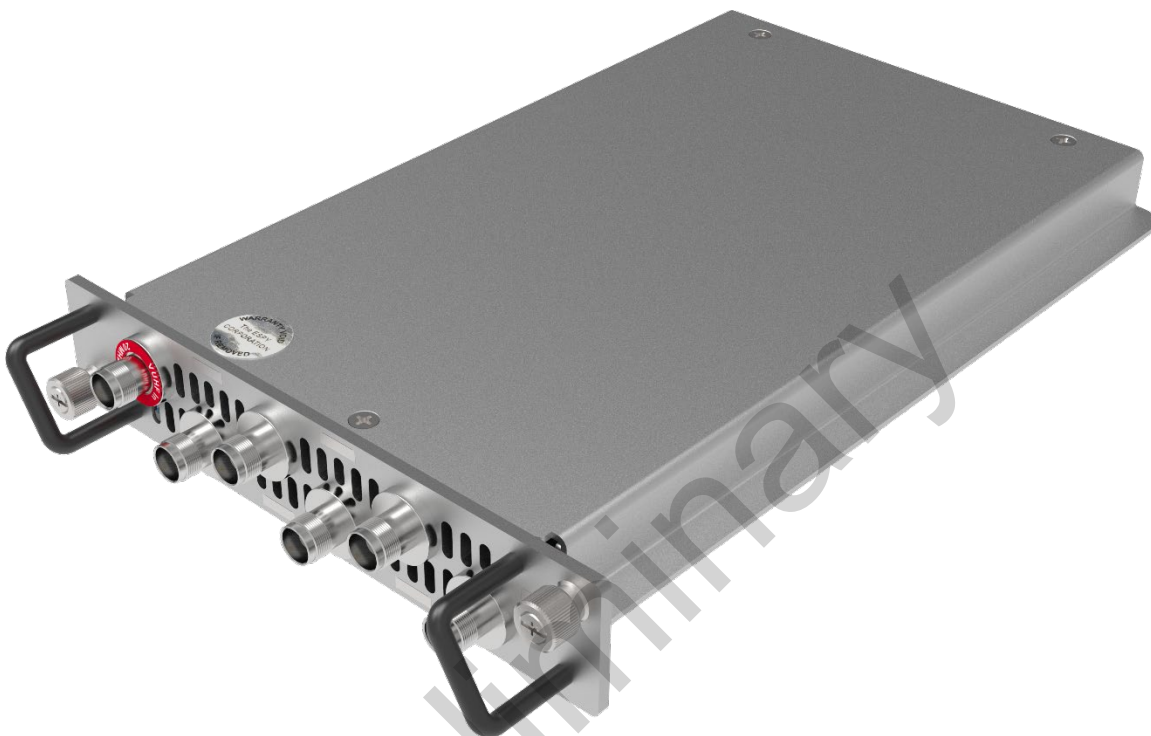


### HF Specifications

- Passband 0.3 - 36 MHz
- Guaranteed Spec Range 3 - 30 MHz
- Gain 1.5 dB +/- 0.5 dB
- NF 4.8 dB typical
- Max Input +15 dBm
- OIP2 +80 dBm typical
- OIP3 +37 dBm typical
- Phase match output to output: +/- 0.25 deg typical, +/- 0.5 deg max
- Phase match unit to unit: +/- 1 deg typical, +/- 2 deg max
- Output to Output Isolation: 40-50 dB \*(pair dependent, amplifier powered, all other ports terminated)
- Power requirements +9-36 VDC, 2.5 Watts

### V/UHF 1x5 Multicoupler Module

Espy's teamSENTINEL active V/UHF multicoupler module provides V/UHF in-phase RF distribution from a single antenna source with up to five RF outputs, making them ideal for demanding V/UHF direction finding applications. Nominal gain allows units to be daisy chained if more outputs are needed. Each module supports 1-In by 5-Out wideband V/UHF RF connections.



### V/UHF Specifications

- Passband 20 - 6000 MHz
- Guaranteed Spec Range 30 - 6000 MHz
- Gain TBD
- NF TBD dB typical
- Max Input +10 dBm
- OIP2 TBD dBm typical
- OIP3 TBD dBm typical
- Outputs are Group Delay Matched for TDOA applications
- Output to Output Isolation: TBD dB \*(pair dependent, amplifier powered, all other ports terminated)
- Power requirements +9-36 VDC, TBD Watts

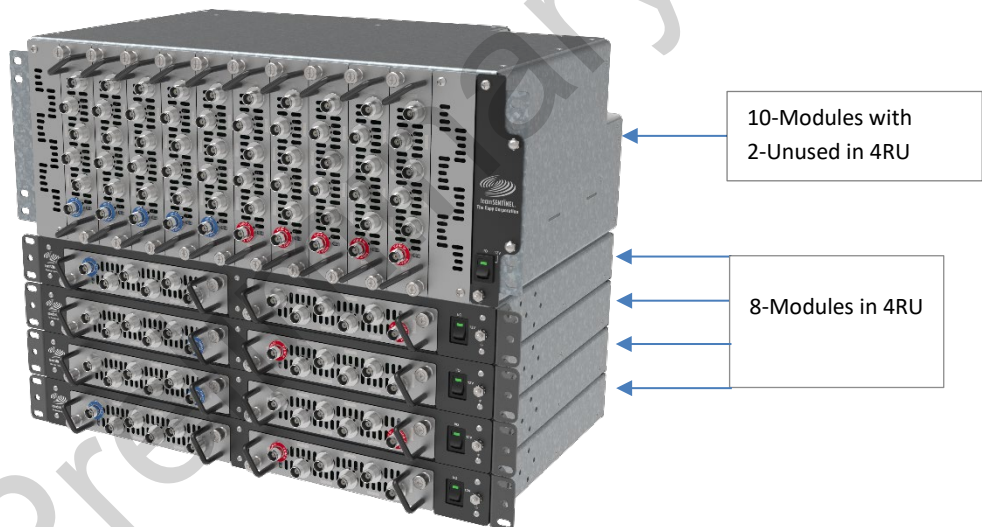
# Espy RF Multicoupler Solutions

## Design Features

- Optimized HF and V/UHF frequency band coverage
- Compact and modular
- TNC connections for reliable operations
- Phase stability across outputs and modules
- Outstanding RF specifications across the wideband
- Hot swappable modules easily replaced
- 4RU enclosure, 100 Watts max
- 1RU enclosure, 30 Watts max
- Steel enclosure provides magnetic shielding from adjacent equipment

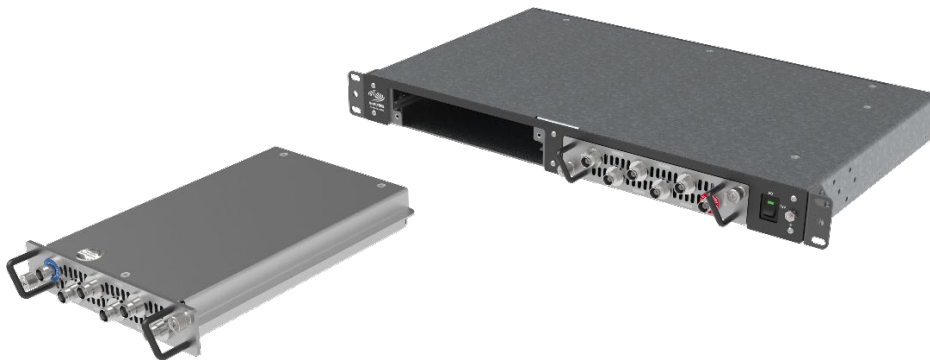
## Rack-Mount Enclosures

Espy RF multicoupler modules can be delivered in either a 1RU two module, or 4RU twelve (12) module 19" rackmount enclosure. HF and V/UHF modules can be installed into the same enclosure if required.



## 1RU Enclosure

- 1RU Tall x 10.4" Deep
- Weight: 8.5 lbs./Empty, 10.5 lbs./2-modules



## Espy RF Multicoupler Solutions

---

### 4RU Enclosure

- 4RU Tall by 11" Deep
- Weight: 13.6 lbs./Empty, 21.6 lbs./12-modules

